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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,567	06/26/2003	Hung T. Dinh	AUS920030153US1	4435

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EXAMINER

CHANNAVAJALA, SRIRAMA T

ART UNIT	PAPER NUMBER
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2166

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/607,567

Applicant(s)

DINH ET AL.

Examiner

Srirama Channavajjala

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-7 and 9-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7 and 9-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Claims 1-2,4-7,9-20 are pending in this application.
2. Claims 3,8 have been cancelled [4/20/2006].
3. Claims 1,4,7,9-12,14,16-19 have been amended [4/20/2006].

Drawings

4. The Drawings filed on 6/26/2003 are acceptable for examination purpose.

Information Disclosure Statement

5. The information disclosure statement filed on 6/23/2003 is in compliance with the provisions of 37 CFR 1.97, and has been considered and a copy is enclosed with this Office Action.

Claim Rejections - 35 USC § 112

6. In view of applicant's amendment to Claim 4,6,9,11,14,16,18 the rejected under 35 U.S.C. 112, second paragraph, as set forth in the previous office action is hereby withdrawn.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. **Claims 1-2,4-5,7,9-10,12-15,17-18,20 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Bruso et al. [hereafter Bruso]*, US Patent No. 6615219, filed on Dec 29,1999, published on Sept 2,2003 in view of *Jarvis et al. [hereafter Jarvis]*, US Patent No. 6424976 filed on March 23,2000, published on July 23, 2002.**

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9. As to claim 1, 7, 12, Bruso teaches a system which including 'determining that blob data in a source field is associated with a first coded character set identifier' [col 3, line 20-24, line 26-29], Bruso teaches managing binary large objects in a database particularly in a relational database, Bruso also teaches both non-BLOB and BLOB data especially BLOB identifiers or BLOB ID refers only to BLOB data that including length code, address code as detailed in col 3, line 26-29;

'determining a second coded character set identifier' [col 3, line 58-65, line 66-67, col 4, line 1-5, line 16-18], Bruso teaches each data block stores one or more rows of data, as noted in the database management system, that includes a page number code which tells the number of pages, page size code and data records as detailed in col 3, line 59-65; 'converting the blob data from the first coded character set identifier to the second coded character set identifier' [col 3, line 22-24], Bruso suggests each row includes non-BLOB data, and BLOB identifier which refers BLOB data as detailed in col 3, line 22-24; 'wherein the first coded character set identifier specifies a first character set, a first code page, and a first encoding scheme' [col 3, line 47-51] Bruso suggests data pages from control block further each data page is clearly detailed in fig 3, wherein the first code page comprises a group of specifications of code points for each character in the first character set' [col 3, line 55-65], Bruso also suggests each data page includes a page number code which tells the number of page, a page size, number of words on the page and like is part of the page group specifications as detailed in col 3, line 55-65;

It is however, noted that Bruso does not specifically teach 'target field, replication the blob data from the source field to the target field', 'converting the blob data' although Bruso specifically teaches relational database table having both non-BLOB and BLOB data, particularly BLOB data is identified with BLOB ID as detailed in fig 2-3. On the other hand, Jarvis disclosed 'target field' [col 2, line 52-57], Jarvis specifically teaches both new and older servers particularly syntax that is supported by older and newer servers, newer server corresponds to target servers consisting of data and respective attributes as detailed in col 2, line 44-45; 'replication the blob data from the source field to the target field' [col 4, line col 3, line 9-13, col 5, line 18-23], Jarvis specifically teaches replicating and converting the attributes to new syntax format such that old server is capable of maintaining the referential integrity of distinguished names or DNs as detailed in fig 3, col 5, line 18-23.

It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Jarvis into database management system having binary large objects of Bruso et al because both Bruso, Jarvis are directed to databases and or directory information, particularly both Bruso, Jarvis specifically directed to "BLOB" [see Bruso: fig 2-3; Jarvis: col 1, line 50-55, col 3, line 62-65], Bruso also suggests cyclic redundancy check of data in the database [Bruso: col 3, line 26-27; while Jarvis specifically suggests conversion of new attributes from the new syntax by separating "blob data" [col 3, line 62-64]

One of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Jarvis into database management system having binary large objects of Bruso et al because that would have allowed users of Bruso to converting the attributes, and replicate in its current form using Jarvis's conversion routine as detailed in fig 2, fig 3A col 4, line 48-50 particularly recognizing the version of conversion between older servers and the new servers , thus any change in data either from the source server or target server replication process to keep updated attribute data in the Novel directory services [see Jarvis: Abstract], bringing the advantages of sophisticated naming schemes and a powerful distributed database as suggested by Jarvis [col 1, line 31-34]

10. As to claim 2, and 13, Jarvis disclosed 'target field has an associated type of character' [col 4, line 58-62].

11. As to claim 5,10,15, Bruso disclosed 'second coded character set identifier col 3, line 25] specifies a second character set [col 3, line 25, line 30-31] , a second code page, and a second encoding scheme' [col 3, line 47-48].

12. As to claim 17, Bruso disclosed 'a processor, and a storage device encoded with instructions that when executed on the processor' [fig 5B-5C,fig 6, col 7, line 7-12]; 'determining that blob data in a source field is associated with a source coded character set identifier, wherein the source coded character set identifier specifies a source

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character set, a source code page, and a source encoding scheme' col 3, line 20-24, line 26-29], Bruso teaches managing binary large objects in a database particularly in a relational database, Bruso also teaches both non-BLOB and BLOB data especially BLOB identifiers or BLOB ID refers only to BLOB data that including length code, address code as detailed in col 3, line 26-29; 'wherein the source code page comprises a group of specifications of code points for each character in the source character set' [col 3, line 55-65], Bruso specifically teaches data pages, particularly, each page includes page control block is part of the specification because page control block tells the number of page, page size code, size of the page, words on the page and like as detailed in col 3, line 55-65;

'determining 'coded character set identifier' col 3, line 24], BLOB ID; associated type of character, and code page, encoding scheme' col 3, line 42-51, fig 3].

It is however, noted that Bruso does not specifically teach target field, replication the blob data from the source field to the target field, 'replicating further comprises converting the blob data", although Bruso specifically teaches relational database table having both non-BLOB and BLOB data, particularly BLOB data is identified with BLOB ID as detailed in fig 2-3. On the other hand, Jarvis disclosed 'target field' [col 2, line 52-57], Jarvis specifically teaches both new and older servers particularly syntax that is supported by older and newer servers, newer server corresponds to target servers consisting of data and respective attributes as detailed in col 2, line 44-45; 'replication the blob data from the source field to the target field' [col 4, line col 3, line 9-13, col 5, line 18-23], Jarvis specifically teaches replicating and converting the attributes to new

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syntax format such that old server is capable of maintaining the referential integrity of distinguished names or DNs as detailed in fig 3, col 5, line 18-23

It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Jarvis into database management system having binary large objects of Bruso et al because both Bruso, Jarvis are directed to databases and or directory information, particularly both Bruso, Jarvis specifically directed to "BLOB" [see Bruso: fig 2-3; Jarvis: col 1, line 50-55, col 3, line 62-65], Bruso also suggests cyclic redundancy check of data in the database [Bruso: col 3, line 26-27; while Jarvis specifically suggests conversion of new attributes from the new syntax by separating "blob data" [col 3, line 62-64]

One of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Jarvis into database management system having binary large objects of Bruso et al because that would have allowed users of Bruso to converting the attributes, and replicate in its current form using Jarvis's conversion routine as detailed in fig 2, fig 3A col 4, line 48-50 particularly recognizing the version of conversion between older servers and the new servers , thus any change in data either from the source server or target server replication process to keep updated attribute data in the Novel directory services [see Jarvis: Abstract], bringing the advantages of sophisticated naming schemes and a powerful distributed database as suggested by Jarvis [col 1, line 31-34]

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13. As to claim 20, Jarvis disclosed 'source relational database and the target field is in a target relational database' [fig 1, col 1, line 31-34,col 3, line 49-55], Jarvis specifically suggests distributed database, typically multiple servers configured and connected as detailed in fig 1

14. As to claim 4,9,14,18, both Bruso, Jarvis do not specifically teach DBCS or double byte character set, although both Bruso, does support one-byte i.e. 8-bit [256 characters], while Jarvis does disclose 32-bit unsigned integer [Jarvis: col 4, line 31-33].

It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to use 2-byte code i.e.16 bit [256 x 256 = 65,536 characters] because that would have allowed users of Bruso' database management system particularly large objects, and Jarvis novel directory services in a distributed database particularly replicating "blob" data support various data types, and other relevant supported encoding schemes.

15. **Claims 6,11,16,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Bruso et al. [hereafter Bruso]*, US Patent No. 6615219, filed on Dec 29,1999, published on Sept 2,2003 , Jarvis et al. [hereafter Jarvis], US Patent No. 6424976 filed on March 23,2000, published on July 23, 2002 as applied to claims 1,7,12,17 above, and further *in view of* Margulies et al. [hereafter Margulies], US Patent No. 6560596 filed on Aug 30,1999, published on May 6, 2003.**

16. As to claims 6,11,16,19, both Bruso, Jarvis do not specifically teach encoding scheme is Universal character Set transformation-8. On the other hand, Margulies disclosed 'encoding scheme is Universal character Set transformation -8' col 11, line 55-62, col 14, line 20-25], Margulies specifically disclosed Unicode in translating names in distributed database system [col 11, line 17-19], further in the distributed data base system there is a requirement of managing domain name space across network particularly related to multi-language names, therefore, future version of the protocol will distinguish queries in a single universal encoding for example UTF-8 from legacy queries in, nominally ASCII as detailed in col 14, line 20-25 (encoding=UTF-8). Therefore, it would have been obvious to one of the ordinary skilled in the art at the time of applicant's invention to incorporate the teachings of Margulies into Bruso et al, Jarvis et al. because that would have allowed users of Bruso, Jarvis to implement multiscript database system , particularly encoding and pointer to value data as suggested in fig 1, Margulies capable of checking for universal encoded entry in the database, thus it ensures encoding corresponds to each database of multiple national encoding databases [Margulies: col 4, line 48-55].

Response to Arguments

17. Applicant's arguments filed on 4/20/2006 with respect to claims 1-2,4-7,9-20 have been fully considered but they are not persuasive, for examiners' response see the discussion below:

a) At page 7-8, claims 1,12,17, applicant argues that Bruso do not teach or suggest specifications of code points for each character in a character set as recited in claim 1.

As to the above argument, firstly, Bruso is directed to managing binary large objects in a database, more specifically, one or more object identifiers that refers binary large objects [see Abstract], secondly, Bruso suggests data structure scheme , particularly, logical view of file in which, data pages are described for example each page includes page control block, and data block as detailed in fig 3, col 3, line 55-59; thirdly, Bruso also suggests each page is identified with page number code that specifies not only size of the page, number of characters on the page both available and used for records for allocating space from the page to data records [col 3, line 59-65]that corresponds to code points because as best understood by the examiner, code points is merely integer number that represents character set.

It is however, noted that Bruso does not specifically teach target field, replication the blob data from the source field to the target field, 'replicating further comprises

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converting the blob data”, although Bruso specifically teaches relational database table having both non-BLOB and BLOB data, particularly BLOB data is identified with BLOB ID as detailed in fig 2-3. On the other hand, Jarvis disclosed ‘target field’ [col 2, line 52-57], Jarvis specifically teaches both new and older servers particularly syntax that is supported by older and newer servers, newer server corresponds to target servers consisting of data and respective attributes as detailed in col 2, line 44-45; ‘replication the blob data from the source field to the target field’ [col 4, line col 3, line 9-13, col 5, line 18-23], Jarvis specifically teaches replicating and converting the attributes to new syntax format such that old server is capable of maintaining the referential integrity of distinguished names or DNs as detailed in fig 3, col 5, line 18-23

It would have been obvious to one of the ordinary skill in the art at the time of applicant’s invention to incorporate the teachings of Jarvis into database management system having binary large objects of Bruso et al because both Bruso, Jarvis are directed to databases and or directory information, particularly both Bruso, Jarvis specifically directed to “BLOB” [see Bruso: fig 2-3; Jarvis: col 1, line 50-55, col 3, line 62-65], Bruso also suggests cyclic redundancy check of data in the database [Bruso: col 3, line 26-27; while Jarvis specifically suggests conversion of new attributes from the new syntax by separating “blob data” [col 3, line 62-64]

One of the ordinary skill in the art at the time of applicant’s invention to incorporate the teachings of Jarvis into database management system having binary large objects of Bruso et al because that would have allowed users of Bruso to

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converting the attributes, and replicate in its current form using Jarvis's conversion routine as detailed in fig 2, fig 3A col 4, line 48-50 particularly recognizing the version of conversion between older servers and the new servers , thus any change in data either from the source server or target server replication process to keep updated attribute data in the Novel directory services [see Jarvis: Abstract], bringing the advantages of sophisticated naming schemes and a powerful distributed database as suggested by Jarvis [col 1, line 31-34]

Conclusion

The prior art made of record

- | | | |
|----|---------------|---------|
| a. | US Patent No. | 6615219 |
| b. | US Patent No. | 6424976 |
| c. | US Patent No. | 6560596 |

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is 571-272-4108. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam, Hosain, T, can be reached on (571) 272-3978. The fax phone numbers for the organization where the application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

SC
Patent Examiner.
June 26, 2006.


SRIRAMA CHANNAVAJJALA
PRIMARY EXAMINER